

1) Sensing surface, 2) Housing, 3) Cover, 4) Potentiometer, 5) LED function indicator



**Basic features**

<b>Approval/Conformity</b>	CE UKCA cULus WEEE
<b>Basic standard</b>	IEC 60947-5-2
<b>Scope of delivery</b>	Screwdriver Short guide Nut (2x)
<b>Sensitivity</b>	Switching distance adjustable
<b>Series</b>	M12

**Display/Operation**

<b>Function indicator</b>	yes
<b>Power indicator</b>	no

**Electrical connection**

<b>Cable diameter D</b>	3 mm
<b>Cable length L</b>	2 m
<b>Conductor cross-section</b>	0.14 mm <sup>2</sup>
<b>Number of conductors</b>	3
<b>Polarity reversal protected</b>	yes
<b>Protection against device mix-ups</b>	yes
<b>Short-circuit protection</b>	yes

**Electrical data**

<b>No-load current I<sub>o</sub> max. at U<sub>e</sub></b>	15 mA
<b>Operating voltage U<sub>b</sub></b>	12...35 VDC
<b>Rated insulation voltage U<sub>i</sub></b>	75 V DC
<b>Rated operating current I<sub>e</sub></b>	200 mA
<b>Rated operating voltage U<sub>e</sub> DC</b>	24 V
<b>Switching frequency</b>	100 Hz
<b>Utilization category</b>	DC -13
<b>Voltage drop static max.</b>	1.3 V

**Environmental conditions**

<b>Ambient temperature</b>	-30...60 °C
<b>Contamination scale</b>	1
<b>IP rating</b>	IP65

**Functional safety**

<b>MTTF (40 °C)</b>	450 a
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**Interface**

<b>Switching output</b>	PNP normally open (NO)
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**Material**

<b>Cover material</b>	POM
<b>Housing material</b>	PTFE
<b>Material jacket</b>	PUR
<b>Material sensing surface</b>	PTFE

Capacitive Sensors  
**BCS M12TTG1-PSM40C-ET02**  
Order Code: BCS00AU

**BALLUFF**

**Mechanical data**

Dimension	Ø 12 x 50 mm
Installation	for flush mounting
Size	M12x1
Thread (A)	M12x1
Tightening torque	0.5 Nm

**Range/Distance**

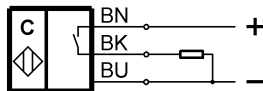
Measuring range	1...4 mm
Rated operating distance $S_n$	4 mm
Temperature drift max. (% of $S_r$ )	20 % [-5...55 °C]

**Remarks**

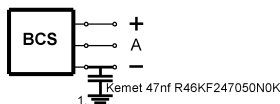
The potentiometer does not have a fixed stop, but can be turned endlessly without destroying anything.  
If no change in the switching signal is detected, the potentiometer should be turned forwards or backwards until a signal change occurs at the output.  
For more information about MTTF and B10d see MTTF / B10d Certificate

Indication of the MTTF- / B10d value does not represent a binding composition and/or life expectancy assurance; these are simply experiential values with no warranty implications. These declared values also do not extend the expiration period for defect claims or affect it in any way.

**Wiring Diagrams**



**Installation remarks**



1) Machine GND